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Written Testimony on

Logs in the Road: Eliminating Federal Red Tape and Excessive Litigation to Create Healthy Forests, Jobs
and Abundant Water and Power Supplies

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Dear Chairmen McClintock and Bishop and Members of the Committee, thank you for prioritizing your time to learn about the needs of the remaining timber industry in this region. Thank you for inviting me to be a part of this hearing.

I am a member of a group of investors who own the sawmill property in Saratoga, WY. The Saratoga mill has been idle since 2002 and is one of only two large sawmills left in this region – the mill in Montrose is the other one. Our group intends to reopen the Saratoga sawmill, but the success of this venture will be dependent on reversing the impact of policies and regulations that have decimated the Colorado sawmill industry in the past few decades.

Having viable sawmills is beneficial to the region in many ways:

1. These two sawmills provide the forests in Colorado with the only large, commercially viable means to help alleviate the impact of the massive insect infestations and reduce the potential for devastating wildfires.
2. Operating sawmills are necessary for the long-term health of Colorado's uninfected forests as a means of active forest management required to enhance the forests' future resilience to fire as well as numerous types of insects and diseases.
3. These sawmill operations provide a meaningful economic driver for the region. This can be measured in the value of products produced from the timber, the hundreds of jobs for sawmill employees, loggers and truck drivers, and the positive impact to all the small businesses and communities that directly and indirectly benefit from the economic activity of the timber industry. To the extent that fires are reduced, there is also an economic benefit to the public – for instance the combined costs of just three of the large fires in Colorado since 2002 has exceeded \$500 million.

Simply put, operating these sawmills uses the free market forces to help remedy a pressing need in Colorado and Wyoming as well as provides support for the long-term health of the vast forests in this region.

A viable sawmill industry in Colorado will require three things:

1. **A stable supply of timber sales from the USFS. The supply must be geographically close to the sawmills, in sufficient quantity to support the needs of those mills and it must be sustained at those levels on an ongoing basis beyond the current need of removing infected trees.** This is largely a matter of resource allocation. For example, we believe doubling the volume of timber sold from the Northern Colorado area is necessary to support the Saratoga mill at efficient production levels. It is my understanding that doubling the

timber sales in this area requires adding just 11 people to the current staff. This modest investment would be paid back from direct payments for the timber sold, the reduced costs of stewardship contracts, and the potential savings from reduced wildfire risks. The commitment for long-term access to this timber is necessary to justify the long-term nature of these investments and additional investments such as those which hold great promise for using bio-mass from the forest for generating clean-renewable energy. But those investments are not justified without a stable, long-term supply of timber.

2. **The timber sales must be economically viable. Viability is determined by the composition of the timber being sold and the performance requirement under those contracts.** Lodgepole pine, the type of tree most widely infested, has relatively low commercial appeal, so the timber contracts must be written in a way that harvesting is not cost prohibitive.

3. **The industry must comply with current environmental regulations, but it needs protection from malicious environmentalist actions such as those that destroyed the timber industry in other parts of the country.** To understand this, we need look no further than Arizona where in 1996 an environmental group won a court injunction that temporarily shut down logging on all national forests in Arizona and New Mexico. As a result, the Arizona timber industry is now largely extinct. Since then, Arizona has had the five largest forest fires in its history. For more than a decade, that state's government has desperately been trying with financial incentive and other means, to reestablish an Arizona timber industry but has been unsuccessful – it simply is not economically feasible to replace what was lost. In Colorado, what remains of the timber industry must be viewed as a precious resource for the state. It needs to be protected, because if the industry, and in particular if these two mills, are lost, like in Arizona, they will not be rebuilt.

There is an opportunity for the last two large sawmills in this region, using effective private enterprise, to aid in the near and long-term timber management needs of Colorado and Wyoming. For this to happen, it is essential for the US Forest service to provide an adequate, long-term stable supply of timber, under economically viable terms. It is also essential that the timber industry be provided protection from an unreasonable use of environmental regulations such as that which has destroyed other regional timber industries.

Thank you for your invitation to speak at this hearing. Your leadership is a critical component in the future of this industry. I would be happy to answer any questions.

FOLLOWING IS INFORMATION SUPPORTING THE STATEMENTS ABOVE:

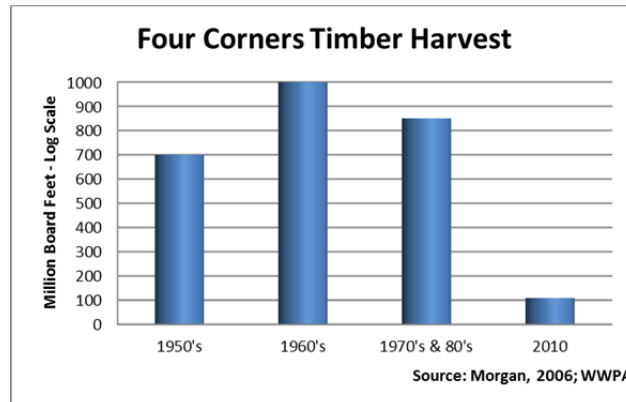
HISTORY OF THE COLORADO TIMBER INDUSTRY

A once vibrant industry, built up over a century, has been decimated due to the lack of access to Colorado's abundant timber resources.

To understand the current crisis facing the forests in Colorado, it is helpful to review the history of the Colorado timber industry. The Colorado timber industry began in the 1860s when vast tracts of virgin forests were harvested to support mining, railroads and housing development in the state. Following World War II, with strong housing markets and public policy encouraging timber production on National Forests, timber harvests for industrial products in the Four Corners States increased from about 700

million board feet (MMBF, Scribner log scale) annually during the early 1950s to a peak of approximately 1,000 MMBF in the late 1960s.

During the 1970s and 1980s, harvest volumes dropped somewhat with harvests during the late 1980s averaging about 850 MMBF annually. Timber harvests from the region dramatically declined during the 1990s, caused largely by decreases in the harvests from National Forests caused by litigation related to threatened and endangered species and reduced Federal budget levels.



This litigation caused the USFS to dramatically reduce the volume of timber sold in the Colorado from the high in the 1960s down to an average of just 40 - 45MMBF per year from 2003-2007. The reduced supply of timber could no longer support the needs of the timber industry and the effect in Colorado was dramatic; two oriented strand board mills closed, one in Olathe and the other in Kremmling; a large sawmill in Walden closed in 1994; three of Colorado's largest multi-national mills closed in 2001 and 2002; a large independently-owned mill at South Fork closed in 2001 (after 50 years of operation); and nine other medium-sized mills and dozens of small mills have closed their doors since 1982.

Unfortunately, timber management in the Colorado forests is dependent upon an active timber industry for timber stand improvements using treatments that harvest wood products. With the majority of local mills closing, the industry has reduced capacity to harvest timber (logs can only be economically shipped short distances). Consequently, over the years, the Colorado forests have experienced increased stand density and an accumulation of ladder-fuels; conditions that have directly led to the large-scale wildfires and insect epidemics now facing the state.

Today, if we do not count the two dozen very small operators with 10 or fewer employees, there are just two medium sized and one large operating mills in Colorado. Moreover, the large sawmill in Montrose is financially troubled and operating under receivership. A second large sawmill in Saratoga, WY is well located to service the northern Colorado forests (where the heaviest concentration of beetle killed pine is located), but has been idle since 2002 when it was shut down due to a lack of logs.

THE ROLE OF THE USFS IN THE COLORADO TIMBER INDUSTRY

The United States Forest Service manages the vast majority of timber in Colorado and controls the destiny of the Colorado sawmill industry.

Any discussion of the Colorado timber industry requires a discussion of the USFS. Nearly 68 percent of Colorado's forests are in federal ownership and nearly three-quarters of the state's high-elevation, commercially attractive species such as spruce-fir, lodgepole pine and aspen are located on USFS lands. In contrast, the majority of the Colorado forests controlled by private lands are low elevation species.

This creates a situation where even modest size lumber operations in the state cannot survive without purchasing timber directly or indirectly from the USFS. Of course, this was conclusively demonstrated by the failure of so many Colorado timber operations discussed above over the years when the USFS dramatically reduce the amount of timber sales. The 40-45 MMBF of timber sold annually in 2003 - 2007 was clearly inadequate to support a healthy timber industry as the single remaining large sawmill in Colorado, and the one just north in Saratoga, Wyoming, both require 40 MMBF annually to operate even a single shift (and to operate efficiently, should run multiple shifts).

Currently the restrictions on timber sales in this area appear to be primarily an issue of funding and resource allocation. With a tightening federal budget, fiscal allocations to the region are projected to fall and the volume of timber projected to be sold in this region in the coming years is expected to be only a fraction of the timber that could be sold, as identified by the USFS in its internal forecasts.

Fortunately, the amount of funding necessary to spur the Colorado timber industry appears to be fairly modest, particularly in light of the benefits. To understand the funds needed, it is helpful to understand the process the USFS has to go through to prepare a timber sale.

PROCESS TO PREPARE USFS TIMBER SALES

An understanding of the process and resources required by the USFS to prepare a tract of timber for sale.

Before committing to a timber sale at a particular site, the Forest Service is required to analyze virtually every environmental impact that might result from making that sale and to document in detail the results of those analyses. The process requires compliance with the National Environmental Policy Act (NEPA), and in the case of programmatic Land and Resource Management Plans, the National Forest Management Act (NFMA). Several of the key documents developed for a typical timber sale are the environmental assessment, biological evaluation, decision notice, and "Finding of No Significant Impact." The process involves the work of trained foresters, wildlife experts, hydrologists and archeologists and can take 1.5 to 3 years to complete.

Historically once this work was done and the decision to go forward with the sale was made, the process entered an appeal phase where the public could enter an appeal of the decision. Recently, this has been changed to an objection phase which is intended to streamline the process, but historically this phase has taken 1 to 5 years when caught up in litigation.

Once the objection process is over, the Forest Service identifies the particular stand(s) of timber for the sale, puts a boundary around the unit, marks the trees if required, measures the trees, notes defects and other characteristics that help define the volume and other specifics of the sale. This field process takes about six months to a year. The rest of the process is office work that can be done in a matter of weeks. All told, the process typically takes about 3 to 3.5 years to complete.

The primary limiting factor of increasing the amount of timber sales, in light of the process required to prepare the timber sales, appears to be an issue of resource allocation or funding levels. The resources are primarily the staff required to prepare the timber sales. In the northern region of Colorado, the USFS employs six foresters, two wildlife experts, an archeologist and a hydrologist and perhaps one other individual in preparing the current level of timber sales. The Saratoga sawmill could process nearly double the annual amount of timber in the sales that are projected to be prepared by this team for the Medicine Bow – Routt, Arapahoe – Roosevelt and White River Forests over the next several years. Doubling the level of timber contracts would require doubling, or adding eleven people, to the staff to prepare those sales. The cost of this increased staff could be offset by the revenue generated

from those contracts, the reduced cost of stewardship contracts as well as the potential cost reductions from the reduced risk of fire in the logged areas.

The second factor influencing an assured timber supply to the industry is the current inability of the USFS to make long-term commitments on the volume of timber sold in out years. The USFS service develops a five year forecast of timber sales in the region. Execution of this plan is dependent on a number of factors, but the primary factor is the allocation of resources which is an annual event. The annual nature of the funding helps to discourage any investment in the industry in this region because meaningful investments typically require multi-year paybacks. The USFS and industry need to find a means of a multi-year commitment for the timber supply in order to incentivize addition investments.

POINT NO. 1: A MINIMUM REQUIREMENT FOR AN ACTIVE AND HEALTHY TIMBER INDUSTRY IN COLORADO IS THE ALLOCATION OF ENOUGH FUNDING FOR THE USFS TO OFFER A SUFFICIENT NUMBER OF TIMBER CONTRACTS TO SUPPORT SAWMILL OPERATIONS IN THE REGION.

BENEFITS OF THE SAWMILL INDUSTRY TO COLORADO

And active sawmill industry in Colorado benefits the people, economy and environment.

An active timber industry in Colorado, supported by an appropriately increased volume of USFS timber sales, provides a number of benefits to Colorado and the forests in the area. First is the economic impact to the state.

Today Colorado, a state rich in timber supply, imports more than 90 percent of the wood products consumed in the state from other states and countries. Increasing timber harvests in the state can be used to spur economic growth measured in the products produced from those timber harvests, the hundreds of jobs for sawmill workers, loggers and truck drivers and all the direct and indirect benefits to the communities and small businesses supporting the economic activity of the timber industry.

As an example, I recently spoke with the mayor of a small town that previously had a small operating sawmill. After that sawmill closed in 2009, families left town to find work and there was a 40% drop in the number students attending the local school. Without a means to replace those jobs, the mayor expects that the town will need to close the school. If that happens, the mayor has told me that it will be hard to get young families to move there – effectively a death sentence for the town. This is a scenario that has been repeated across the country since sawmills represent an industry often better suited to rural areas rather than to big cities.

POINT NO. 2: COLORADO AND THE REGION HAVE AN OPPORTUNITY TO SPUR ECONOMIC GROWTH WITH A RESURGENCE OF THE TIMBER INDUSTRY IN THE STATE.

In addition to providing economic advantages, the timber industry is essential to maintaining a healthy forest. Today, increased public support for the timber industry in our area is largely the result of the widespread devastation caused by the mountain pine beetle.

Mountain Pine Beetle Devastation

Mountain pine beetles have been part of the natural cycle in Colorado forests for eons, however the extent of the current infestation and the amount of destruction it has wrought is unprecedented. The scope of the infestation was due in large part to the high density and lack of age diversity of the forests. In Colorado, mountain pine beetles attack mature ponderosa and lodgepole pine. In nature, periodic fires and other devastating events thin forests and create an age diversity that limits the impact of a

pine beetle outbreak. Where fire is suppressed, timber harvesting creates the same advantageous environment. However in Colorado, years of fire suppression and years without a vibrant sawmill industry produced a situation in many of the high country forests of dense, mature, eight inches in diameter or larger lodgepole pine; precisely the habitat in which mountain pine beetles thrive. When the epidemic started, there were not the natural age barriers to slow it and the high density of the forests meant the beetles could quickly spread.

The impact on the state of the pine bark beetle should not be understated:

There is an economic impact to the state in reduced recreational activities such as hiking, camping and skiing due to: scenery changes; reduced wind protection; and safety hazards from falling dead trees.

For individual landowners with affected trees on their properties, the financial impact includes: property value reductions; erosion issues from increased water yields; and wood and tree branch disposal challenges.

And of course, the impact of mountain pine beetle killed trees results in an increased potential for wildfire which may result in: loss of life and property; reduced real estate values; changes to tourism-based economies; long-term costs of water supply and reservoir clean-up; and safety hazards from falling dead trees.

Wildfires

Two notable Colorado fires are the Fourmile Canyon fire in 2010 and the Hayman fire in 2002. The Fourmile Canyon fire burned 167 homes, cost \$10 million dollars to fight and resulted in \$217 million in property damage. The Hayman fire was the largest fire in Colorado history and burned 138,000-acres.

The costs of these fires are large by any standard but, according to The Western Forestry Leadership Coalition, a State and Federal government partnership, an accounting of costs should include: suppression costs; other direct costs (private property losses, damage to utility lines, damage to recreation facilities, etc.); rehabilitation costs, indirect costs (lost tax revenues, business revenue and property losses that accumulate over the longer term); and additional costs (these included hard to quantify cost such as extensive loss of ecosystem services, aesthetic and scenic beauty, wildlife existence value, the economic cost of the loss of human life are included here).

With this full accounting, the economic cost to the state for the 2002 Hayman fire was \$208 million, the 2002 Missionary Ridge fire was \$153 million and, of course the total cost of the 2010 Fourmile fire canyon fire greatly exceeded the \$227 million of direct costs.

It is widely accepted that the lack of forest management has resulted in a heightened danger of these massive fires and that more can be expected. Unfortunately, fire danger increases again in approximately 15 to 20 years when the trees killed by the pine bark beetle rot and fall down, adding woody material to the young trees and other fine fuels growing on the forest floor. A fire in this arrangement is difficult to suppress and will pose additional safety hazards to firefighters. Severe wildfires of this type burn at higher intensities and for longer durations which can be very detrimental to plant communities, soils, and watersheds.

There is no practical way to stop a large scale mountain pine beetle epidemic once it has begun and to lessen wildfire hazard it is critical to reduce the number of dead, dry trees as well as infected trees that

will eventually die. Removing these trees has often meant that the property owner (including the USFS) has paid to have the trees removed.

The most cost effective removal of these trees, and the only practical method on a large scale, is to have a commercially viable means of harvesting and selling the timber. There have been a number of articles in the media highlighting various companies trying to make use of the beetle killed timber including companies making wood flooring, furniture, log cabins and heating fuel. There has also been, in one case, \$76 million of federal grant money invested in trying to use wood chips from beetle killed trees as a source for cellulosic ethanol that would break America's "addiction to oil". Unfortunately the ethanol experiment failed without solving the issue of how to operate on a commercially viable scale and all the other commercial efforts in the state for timber usage only equal a fraction of the capacity of either the Montrose or Saratoga sawmills.

The USFS, facing a dwindling commercial timber industry and needing to remove vegetation and perform other activities to promote healthy forest stands, reduce fire hazards, or achieve other land management objectives, was granted authority in 2003 to issue Stewardship contracts for forest management. This authority, which expires in 2013, is being used by the USFS in Colorado and Wyoming to pay private companies to provide forest management and remove infected trees from critical areas.

One of the benefits of stewardship contracting is that some of the cost of treatment is offset with the value of the logs removed in the course of the work. Having an outlet for these logs increases the value of the logs and will ultimately reduce the USFS Stewardship contracting costs. Currently, the largest insect infestations are in Northern Colorado, a relatively long distance from the sawmill in Montrose. Once the Saratoga sawmill is operating, the value of the logs in this area will increase and the USFS will be able to pay less for Stewardship contracts.

The Montrose mill and the Saratoga mill are each capable of processing 40 MMBF of timber annually on a single shift. Operating at multiple shifts, these two large sawmills will only harvest a small portion of the Colorado forests – even operating on two shifts, a sawmill of this size would take more than a thousand years to treat all the timber in Colorado – but these sawmills offer the only large scale method of processing timber and they do so while paying for the timber. This benefits the USFS both directly through revenues from timber sales and indirectly through the reduced cost of stewardship contracts in the area. In all, these sawmills provide a cost effective means of removing infected trees in the Colorado and Wyoming region.

Colorado Spruce and Ponderosa Pine Forests

It must be noted that although the mountain pine beetle continues to be Colorado's most damaging forest pest, this is not the only significant threat to Colorado's forests. The same beetle is also attacking an increasing amount of ponderosa pine forests; 275,000 acres in 2011 alone. Also, the spruce bark beetle, the second greatest insect threat to the state, is causing extensive mortality in Colorado's spruce forests and as of 2011 had already infested 262,000 acres of Engelman Spruce. Controlling the impact of these infestations, similar to lodgepole pine infestations, requires removal of the timber and emphasizes the importance of an active sawmill industry servicing the state.

POINT NO. 3: LARGE SAWMILL OPERATIONS PROVIDE A COST EFFECTIVE MEANS OF TIMBER MANAGEMENT THAT IS NOT MATCHED BY OTHER COMMERCIALY VIABLE OPTIONS.

Long-term Forest Management

When faced with widespread infestations now prevalent in Colorado, there is a clear and pressing need for removal of as much infected timber as possible. However, ongoing timber harvests in sustainable quantities are also necessary for the long-term health of the forest.

Forests, left completely without human intervention, are subject to a pattern of natural disturbances resulting from wildfires and windstorms and have adapted to these periodic cycles. Lodgepole pine is an example of one species adapted to this cycle. High-severity fire is the primary type of disturbance shaping the structure of lodgepole pine. The fires clear large areas of tree cover and help control disease and insect pests, and expose mineral soil seedbeds. The lodgepole pine cones open as a result of the high heat from these fires and release their seeds to grow and regenerate the forests in the now-cleared area. Natural wildfires typically burn sections of the forests and help maintain varying age distributions that also control the spread of invasive insects and disease.

Although wildfire is a key part of the ecology of many forest species, the control of wildfire that is necessary to protect human life, communities, watersheds, and fish and wildlife resources means that these forest types must now be maintained by other measures. The Society of American Foresters recommends that clear cutting be used in the development and care of these types of forests since clear cutting closely resembles the natural process and is the preferred means of assuring of prompt (or successful) regeneration. Clear cutting is also the preferred method of harvesting lodgepole pine for commercial uses as lodgepole pine has low commercial appeal and other types of harvesting are cost prohibitive. In the past, and perhaps still today, there has been much public confusion about clear cutting and its effects on the environment. The purely visual impact of a clear cut commonly leads to negative perceptions that manifest an array of misconceptions about sustainability, impacts to soil, water and wildlife, and the compatibility of timber management with recreation.

Good forest management requires different types of timber harvests; in uninfested, healthy spruce forests, thinning is the preferred approach while in healthy lodge pole pine forests, clear cutting remains one of the best methods to create conditions conducive to regeneration.

While today the focus for helping keep Colorado's remaining timber industry alive is understandably because of the very visible impact of the mountain pine beetle, there should be equal concern about encouraging this industry to harvest timber from our green forests as a means of maintaining the health of those forests for the future. Conversely, if those forests are left to rely only on natural processes, we can expect insects, diseases and fire to return in the future and have negative impacts on our forests.

POINT NO. 4: HEALTHY FORESTS REQUIRE AN ACTIVE TIMBER INDUSTRY AND SHOULD BE ENCOURAGED EVEN IN AREAS NOT CURRENTLY AFFECTED BY THE MOUNTAIN PINE BEETLE.

BASICS OF OPERATING A SAWMILL IN TODAY'S ECONOMIC ENVIRONMENT

For sawmills to be financial feasible, timber must be available in a commercially reasonable manner.

The sawmill industry in general is facing significant economic challenges. In the ten years from 2000 to 2010, the number of operating sawmills in the western United States dropped from 287 mills to just 170, a 40% reduction. The decline was due to many factors including a dramatic decrease in lumber prices following the housing burst and escalating fuel prices which have a major cost on hauling the logs to the sawmills.

The economics of operating sawmills is also greatly affected by the timber characteristics. Both of the large sawmills, in Montrose and Saratoga, are stud mills meaning they primarily produce 2X4 studs for framing timber. Studs can be produced from lodgepole pine or Engelmann spruce, with lodgepole pine being the predominate species now available because of the insect infestations. Unfortunately, lodgepole pine is also a species with relatively low economic value. It is typically a smaller diameter tree and that results in relatively more waste when processed into lumber. Spruce, on the other hand, is typically a larger diameter tree and generates relatively more lumber for the volume of timber used.

In Colorado, the value of both lodgepole pine and spruce will diminished as they die and the longer they remain dead in the forest. A tree killed by the pine bark beetle starts drying out and as it does, the sun and other factors cause it to dry out unevenly. This creates cracking (or “checking”) and twisting (“spiraling”). Both these conditions reduce the amount of lumber that can be recovered from a particular volume of timber. The longer a tree remains in the forest, the more deterioration can be expected. Finally, after a period of time, (the actual timeframe depends on various factors, but could be about 5 to 7 years) the trees will be too deteriorated to be of economic value for the sawmills. Furthermore, if the weakened stand of trees are blown down by high winds, the timber cannot be economically recovered. The mountain pine beetle is infecting nearly all the lodgepole pine in the state, so there is a limited window of years where the sawmills will be processing dead timber. In the long-run, the sawmills will need to operate using predominantly green sources of timber.

A further complication is the lack of universal acceptance of beetle kill lumber. Although the mountain pine beetle does not affect the structural integrity of the timber, beetle-killed pine has a distinctive blue stain that can affect its acceptance. As an example, in 2009, Big Horn Lumber, a midsized sawmill operating in Laramie, WY closed citing a lack of market for blue stained pine. In another example, Lowes and Home Depot, have declined to carry beetle killed lumber in their stores.

The USFS, in preparing the timber in this region for sale will have a great impact on the sustainability of the sawmills. The USFS can make these timber sales more attractive to the sawmill operators by including a higher percentage of spruce or not-yet-dead lodgepole pine, or larger diameter trees. Other factors affecting the value of the sale include the cost of the timber (the “stumpage”), the costs for road maintenance, slash deposits and the requirement to remove trees that are not large enough to meet minimum logging size (Product Other than saw Logs - POL).

POL is a major concern for the future of the sawmill industry. The method specified for removing POL will impact the value of the sale particularly if the terms of the sale require the loggers to remove this product from the forest. In some cases, there are economic uses for the POL, such as pellets and fence posts, but material to be removed and processed is expensive to transport relative to the value of the product and in Colorado there is simply not enough demand for the POL and it becomes a liability for the sawmill. As an example, for one recent sale that we analyzed, the cost of removing the POL was several times more expensive than the actual cost of timber and this made that contract uneconomical to bid (we were not the only ones to reach this conclusion, that contract received no bids).

It is important to note that there appears to be a clear push by the forest service and others to find a use for POL. In some cases this push has led to a hope that new technologies will use bio-mass such as POL to help manage forests. In fact there are technologies such as co-generation and biomass gasification that have the promise of using a significant amount forest material such as the POL or sawmill by-products to produce clean energy. However, these processes only operate profitably in conjunction with sawmills, not independent of sawmills. We believe there is an economically viable possibility of building a biomass gasification or co-generation operation that is supported by the sawmill operations,

but only after the sawmill operations are back running profitably and only after a long-term source of timber is assured.

Finally, it is also important to understand that the chance of bringing either one of these two sawmills up and operating efficiently is not without substantial risk to the investors. Before the Saratoga sawmill can be restarted, and perhaps before the Montrose sawmill is transferred out or receivership, the investors will need to have a sufficient supply of timber, on economically viable terms under contract from the USFS.

POINT NO. 5: FOR THE TIMBER INDUSTRY TO SURVIVE IN COLORADO, THE USFS CONTRACTS MUST BE PREPARED IN A WAY THAT IS FINANCIALLY FEASIBLE FOR THE SAWMILLS.

ENVIRONMENTALIST THREATS TO THE COLORADO TIMBER INDUSTRY.

While environmental laws have effectively helped protect the environment from abusive practices, they have also been used to decimate the timber industry to the detriment of the very forests they were intended to save.

Undoubtedly the greatest single cause for the demise of the timber industry in the Rocky Mountains has been the impact of the environmentalist movement. The environmentalist movement of the late 1960's began when a controversy developed over the practice of clear cutting and terracing on steep slopes. The final result of the controversy was passage of the National Forest Management Act of 1976 (NFMA) which set guidelines for clear cutting.

The seventies also saw passage of The National Environmental Policy Act of 1969, signed into law January 1, 1970, which mandated that the environmental impacts of proposed Federal projects be comprehensively analyzed and The Endangered Species Act of 1973 which provided for protection of rare, threatened, and endangered animal and plant species. A watershed event occurred on August 7, 1986, when the U.S. Forest Service acted to protect the northern spotted owl from decline and extinction by limiting timber sales in mature portions of National Forests where the animals live.

Combined, a long series of governmental actions and court decisions stemming from these environmental policies resulted in a reduction of more than 75 percent of the timber harvested annually from public lands. Perhaps the clearest example of the impact of the environmental movement, and a warning of what could yet happen in Colorado, is the case of the Arizona timber industry.

The Arizona Timber Industry

For much of the 20th century, a variety of factors combined to interrupt the historic fire cycles over much of Arizona's native forests. This resulted in forests overstocked with small diameter trees, creating a "ladder fuel" situation, which placed millions of acres of Arizona forestland at risk for catastrophic fires. Similar to what is now happening in Colorado, the increasingly destructive cycle of insects, diseases, and wildfire in Arizona's ponderosa pine and pinyon-juniper forest ecosystems poses a significant risk to personal health, animals, watersheds, and property.

In the 1980s, Arizona had an active timber industry that helped maintain the health of the forest and the industry harvested an average of 400 million board feet of timber annually. However beginning in the 1980s, a Tucson-based environmental group, the Center for Biological Diversity, charged that the U.S. population of Mexican spotted owls had shrunk to just a few thousand because of logging in the old-growth ponderosa pines. The group ultimately won a 1996 court injunction that temporarily shut down

logging on all national forests in Arizona and New Mexico. Within a few years, applying more legal pressure on behalf of all affected species, it forced the Forest Service to reduce logging by 70 percent and limit the harvest to trees less than 16 inches in diameter. Years of legal battles had greatly diminished the Arizona timber industry and by 1996 it was largely extinct and the amount of timber harvested from Arizona forests was almost exclusively fuel wood .

"We squashed the timber industry and the Forest Service, and dictated the terms of surrender" in the Southwest, said Kieran Suckling, the director of the Center for Biological Diversity.

But environmentalists' celebrations were cut short by a 2002 conflagration: The Rodeo-Chediski fire burned 467,000 acres (732 square miles), destroyed 400 homes and cost more than \$43 million to fight. This was the largest fire in Arizona history until 2011, when the Wallow fire consumed 538,000 acres in eastern Arizona, destroying 32 homes and costing more than \$79 million to suppress.

Three more of the largest Arizona fires, the Cave Creek Complex (2005) -- 244,000 acres, Horseshoe Two (2011) -- 222,954 acres, and Willow (2004) -- 120,000 acres have all occurred subsequent to the demise of the Arizona Forest Industry. In total, those five fires consumed nearly ten percent of all of Arizona's forests (equivalent to more than 2 million acres if in Colorado). Decades of reduced logging coupled with active fire suppression had made Arizona's famous 2.4-million-acre ponderosa pine belt the most overgrown and flammable thickets in the West.

According to the Arizona's governor office, the Rodeo-Chediski fire in 2002 (along with a smaller fire in 2003), elevated awareness about forest ecosystem conditions and wildfire risks in Arizona. However, by that time it was also recognized by the Arizona agencies that the only cost effective management technique was to involve the timber industry – an option no longer available to the state. Even Kieran Suckling, the director of the Center for Biological Diversity, the very person and organization that had done so much to destroy the timber industry, recognized the need for harvesting timber and in 2009 signed a deal with entrepreneur Pascal Berlioux to try and restart a timber industry in Arizona.

Berlioux's company, Arizona Forest Restoration Products, hoped to do restoration work on at least 600,000 acres over 20 years, cutting only trees that are smaller than 16 inches. In turn, the Center for Biological Diversity promised not to file lawsuits against this work, and to defend the effort in court if other groups sued. Unfortunately, despite collaborative efforts by the State of Arizona, the USFS and others, reestablishing a timber industry has thus far proven to be too great a challenge. Berlioux has since shied away from making the \$250 million investment that he estimated would be required to establish a timber operation in Arizona and no new mills are being built in this area.

Without the prospect of reestablishing an active sawmill industry and in an effort to “create a viable, sustainable industry that is an effective tool in restoring and maintaining healthy forests”, the state sought to use government and financial incentives to create a new, different kind of timber industry using new technology and new products that lacked legitimate markets. Perhaps predictably, these efforts have failed and instead the USFS in Arizona is paying for forest management under stewardship contracts at a rate of about \$420, on average (and sometimes as much as \$1,000) for each acre treated.

The obvious lesson from Arizona is that under the existing laws, the public, and specifically environmentalist groups, can use litigation and other methods to destroy the timber industry. Once lost, the industry cannot be expected to be reintroduced into a region, even with coordinated support and financial incentives from the USFS and state and local governments. To this point, the sawmill equipment in Saratoga was idled and left in place; something that is fairly unusual. If this equipment

had been liquidated (as was the equipment in the Big Horn mill in Laramie) and had to be replaced, there would be no conceivable economic justification for restarting the mill.

At this time, the USFS is operating timber sales in Colorado with what it calls “social license”. This means the public generally supports efforts to harvest trees that have been insect infested. The Colorado public has a high degree of awareness of the impact of beetle killed pine because, among other reasons, a) the dead trees are very visible around highly trafficked areas such as the I-70 corridor and around ski areas such as Steamboat Springs and others, b) there have been many news articles in print and on television regarding beetle-killed pine, and; c) the increasing frequency and severity of large forest fires in the state over the past few years has heightened the awareness of the danger of large tracts of dead trees.

As a result of this awareness, the USFS generally has social license to conduct timber sales in the areas where structures and other human development meet or intermingle with undeveloped wildland; wildland-urban interface (WUI) areas. What is less certain is the USFS’ social license to operate timber sales in non-WUI areas.

It will be important to have timber sales in the non-WUI. First, nearly 20% of Coloradoans live close to nature, surrounded by that wilderness high-risk space and the state's population is projected to blossom in the next 30 years -- with much of the growth expected to occur in those woody areas. Moreover, active timber sales in non-WUI areas are required to maintain the forest health in those areas. In particular, the spread of insect infestation of the Colorado spruce forests cannot be stymied without the ability to harvest infected timber in non-WUI areas. In addition, essential water supplies are at risk from falling trees because of the damage wildfires can cause to watersheds. Within the heart of the outbreak in Colorado and Wyoming, in non-WUI areas, are the headwaters for some of the rivers supplying water to 13 western states.

Dead timber that is not harvested is subject to massive blow downs in the coming years. At the very least, this will impede the rate of regeneration in those forests. What is more, for those blow downs that catch fire, the conflagrations will burn hotter than fires in standing timber and will destroy nutrients in the soil necessary for regeneration.

There is a great deal that is unknown about the long-term impact of the massive kill-off of the forests in Colorado, but there is much to be concerned about in untreated areas. The long-term consequences of the outbreak will be most dramatic in untreated areas where the shift in tree species composition will influence timber and water production, wildfire behavior, wildlife habitat and other forest attributes.

The ability of environmental groups to limit timber harvest to WUI areas, to the detriment to the long-term health of the forests, is a situation that, if unchecked, can easily destroy the remaining timber industry in this region. Political leadership will be required to find a solution allowing sawmills long-term access to timber harvests from national forests in Colorado, both in WUI area and in non-WUI areas.

POINT NO. 6: ENVIRONMENTAL ACTIVISM HAS BEEN A SIGNIFICANT INFLUENCER ON THE DECLINE OF THE TIMBER INDUSTRY, ULTIMATELY TO THE DETRIMENT OF THE FORESTS.

POINT NO. 7: A REGIONAL TIMBER INDUSTRY SHOULD BE VIEWED AS A HIGHLY BENEFICIAL ASSET THAT ONCE LOST, IS UNLIKELY TO BE REESTABLISHED DUE TO THE HIGH COST OF INVESTMENT AND THE UNCERTAINTY OF LONG-TERM RETURNS.